

# **[LOW-PHASE-NOISE OSCILLATOR WITH A MICROSTRIP RESONATOR]**

## **Abstract of Disclosure**

A low-phase noise oscillator with a microstrip resonator for generating a target signal with a predetermined frequency is provided. The resonator includes a first microstrip line and a second microstrip line. The first microstrip line is parallel with the second microstrip line without having any contact. A length of the first microstrip line equals a length of the second microstrip line, and the length equals a quarter wavelength of the target signal. When a plurality of oscillating signals is transmitted to the first microstrip line, one of the oscillating signals having the predetermined frequency will be output from the resonator by an electromagnetic coupling generated between the first microstrip line and the second microstrip line.

Figures